Appl. No. 10/637,710 Amdt. dated September 19, 2007 Reply to Office Action of March 21, 2007

## Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application:

## Listing of Claims:

- (previously presented) A transgenic knockout mouse whose genome
  comprises a disruption in each allele of the mouse's endogenous melanopsin gene, wherein the
  disruption in each allele prevents the expression of a functional melanopsin protein in cells of the
  mouse and the mouse exhibits an attenuated circadian rhythm phase-shift in response to a light
  pulse during a dark portion of an environmental dark/light cycle.
  - (cancelled)
  - (cancelled)
- (previously presented) A cell isolated from the transgenic knockout mouse of claim 1.
  - 5.-21. (cancelled)